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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,323	08/22/2003	Mark Smolenski	00601-0044US	9692
32116 75	90 02/24/2006		EXAMINER	
•	LIPS, KATZ, CLARK	RODRIGUEZ, RUTH C		
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SUITE 3800 CHICAGO, IL 60661			ART UNIT	PAPER NUMBER
			3677	

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/646,323	SMOLENSKI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Ruth C. Rodriguez	3677				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 21 D	<u>ecember 2005</u> .					
2a) This action is FINAL. 2b) ☑ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-27</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>1-20</u> is/are allowed.						
6)⊠ Claim(s) <u>21 and 23-27</u> is/are rejected.						
7) Claim(s) <u>22</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>22 August 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  Notice of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date	6) Other:	,				
U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)  Office Ar	ction Summary Pa	art of Paper No./Mail Date 02162006				

### **DETAILED ACTION**

# Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 21 December 2005 has been entered.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 21, 23, 25 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Barnoff (US 2003/ 0151251 A1).

A method of joining first and second tubular elements (30,22) comprises the steps of: (a) providing a first tubular element (22,22a) having a first axis, a first portion with a radially outwardly facing surface and a first connecting assembly (42); (b) providing a second tubular element (30) having a second axis, a second portion with a radially inwardly facing surface and a second connecting assembly (36); (c) aligning the

first and second tubular elements in a preassembly state with the first and second axes substantially coincident and the first portion adjacent to the second portion (Figs. 2 and 3); (d) relatively axially moving the first and second tubular elements from the preassembly state towards each other into a first relative axial position (inserting 22 inside 30); and (e) relatively moving the first and second tubular elements around the first and second axes from a first rotation position into a second relative rotational position when the first and second tubular elements in the first relative axial position to cause the first and second connecting assemblies to cooperate so as to draw the first and second portions axially towards each other with the first and second tubular elements in a second relative axial position (locking 22 inside 30). At least one of the radially inwardly and outwardly facing surfaces being tapered (32,44) so that by reason of the tapering a frictional force generated between the radially inwardly and outward facing surfaces on the first and second portions is caused to be greater than with the first and second tubular elements in the first relative axial position. The step of causing the first and second connecting assemblies to cooperate comprises causing the first and second connecting assemblies to cooperate to releasably block the first and second tubular elements in the second relative rotational position (Paragraph 0020).

The step of causing the first and second connecting assemblies to cooperate comprises causing a projection (42) of one of the first and second connecting assemblies to move in a groove (36) with an axial rise on the other of the first and second connecting assemblies.

The method further comprises the step of operatively connecting the tubular element to a fluid blower (furnace) so that fluid propelled by the fluid blower is directed through the joined first and second tubular elements (Paragraph 0011).

In combination a first tubular element (22) and a second tubular element (30). The first tubular element has a first axis, a first portion and a radially outwardly facing surface and a first connecting assembly (42) at a first circumferentially facing surface. The second tubular element has a second axis, a second portion and a radially inwardly facing surface and a second connecting assembly (36) at a second circumferentially facing surface. The first portion is extendable with the second portion so that the radially inwardly facing surface on the second tubular element surrounds the radially outwardly facing surface on the first tubular element (Figs. 2 and 3). The first and second tubular elements are positionable in a first relative axial position wherein relative movement of the first and second tubular elements around the first and second axes between (a) a first relative rotational position and (b) a second relative rotational position cause the first and second connecting assemblies to cooperate to draw the first and second portions axially towards each other (Figs. 2 and 3 and Paragraph 0020). The first and second connecting assemblies cooperate so that the first and second circumferentially facing surfaces confront each other with the first and second tubular elements in the second relative rotational position to thereby block relative rotational position back into the first relative rotational position (Figs. 2 and 3 and Paragraph 0020). The first and second tubular elements are positionable in a second relative axial position wherein relative movement of the first and second tubular elements from the

first relative rotational position into the second relative rotational position causes the first and second connecting assemblies to draw the first and second portions axially towards each other further than with the first and second elements in the first relative axial position and the first and second tubular elements moved from the first relative rotational position into the second relative rotational position (Figs. 2 and 3 and Paragraph 0020). The radially outwardly facing surface on the first tubular element and radially inwardly facing surface on the second tubular element are relatively dimensioned and at least one of the radially inwardly facing surface and the radially outwardly facing surface is tapered so that by reason of the tapering the radially outwardly facing surface and radially inwardly surface are urged against each other with a frictional force that is greater with the first and second tubular elements in the second relative rotational position than with the first and second tubular elements in the first relative rotational position (Figs. 2 and 3 and Paragraph 0020).

4. Claims 21, 23, 24, 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Finch (US 2,673,751).

A method of joining first and second tubular elements (1) comprises the steps of:

(a) providing a first tubular element (1) having a first axis, a first portion with a radially outwardly facing surface and a first connecting assembly (9); (b) providing a second tubular element (1) having a second axis, a second portion with a radially inwardly facing surface and a second connecting assembly (6); (c) aligning the first and second tubular elements in a preassembly state with the first and second axes substantially coincident and the first portion adjacent to the second portion (Fig. 1); (d) relatively

axially moving the first and second tubular elements from the preassembly state towards each other into a first relative axial position (inserting 1 inside 1); and (e) relatively moving the first and second tubular elements around the first and second axes from a first rotation position (Fig. 1) into a second relative rotational position (Fig. 2) when the first and second tubular elements in the first relative axial position to cause the first and second connecting assemblies to cooperate so as to draw the first and second portions axially towards each other with the first and second tubular elements in a second relative axial position (Fig. 2). At least one of the radially inwardly and outwardly facing surfaces being tapered (2) so that by reason of the tapering a frictional force generated between the radially inwardly and outward facing surfaces on the first and second portions is caused to be greater than with the first and second tubular elements in the first relative axial position (Figs. 1-9). The step of causing the first and second connecting assemblies to cooperate comprises causing the first and second connecting assemblies to cooperate to releasably block the first and second tubular elements in the second relative rotational position (Figs. 1-9).

The step of causing the first and second connecting assemblies to cooperate comprises causing a projection (9) of one of the first and second connecting assemblies to move in a groove (6) with an axial rise on the other of the first and second connecting assemblies.

The step of causing the first and second connecting assemblies to cooperate comprising causing a plurality of axially spaced projections to interact one each with a plurality of grooves each with an axial rise (Figs. 1-9)

In combination a first tubular element (22) and a second tubular element (30). The first tubular element has a first axis, a first portion and a radially outwardly facing surface and a first connecting assembly (42) at a first circumferentially facing surface. The second tubular element has a second axis, a second portion and a radially inwardly facing surface and a second connecting assembly (36) at a second circumferentially facing surface. The first portion is extendable with the second portion so that the radially inwardly facing surface on the second tubular element surrounds the radially outwardly facing surface on the first tubular element (Figs. 2 and 3). The first and second tubular elements are positionable in a first relative axial position wherein relative movement of the first and second tubular elements around the first and second axes between (a) a first relative rotational position and (b) a second relative rotational position cause the first and second connecting assemblies to cooperate to draw the first and second portions axially towards each other (Figs. 2 and 3 and Paragraph 0020). The first and second connecting assemblies cooperate so that the first and second circumferentially facing surfaces confront each other with the first and second tubular elements in the second relative rotational position to thereby block relative rotational position back into the first relative rotational position (Figs. 2 and 3 and Paragraph 0020). The first and second tubular elements are positionable in a second relative axial position wherein relative movement of the first and second tubular elements from the first relative rotational position into the second relative rotational position causes the first and second connecting assemblies to draw the first and second portions axially towards each other further than with the first and second elements in the first relative axial

position and the first and second tubular elements moved from the first relative rotational position into the second relative rotational position (Figs. 2 and 3 and Paragraph 0020). The radially outwardly facing surface on the first tubular element and radially inwardly facing surface on the second tubular element are relatively dimensioned and at least one of the radially inwardly facing surface and the radially outwardly facing surface is tapered so that by reason of the tapering the radially outwardly facing surface and radially inwardly surface are urged against each other with a frictional force that is greater with the first and second tubular elements in the second relative rotational position than with the first and second tubular elements in the first relative rotational position (Figs. 2 and 3 and Paragraph 0020).

In combination a first tubular element (1) and a second tubular element (1). The first tubular element has a first axis, a first portion with a radially outwardly facing surface and a first connecting assembly (6) at a first circumferentially facing surface. The second tubular element has a second axis, a second portion with a radially outwardly facing surface and a second connecting assembly (9) at a second circumferentially facing surface. The first portion is extendable within the second portion so that the radially inwardly facing surface on the second tubular element surrounds the radially outwardly facing surface on the first tubular element (Figs. 1 and 2). The first and second tubular elements are positionable in a first relative axial portion (Fig. 1) wherein relative movement of the first and second tubular elements around the first and second axes between: (a) a first relative rotational position (Fig. 1) and (b) a second relative rotational position cause the first and second connecting assemblies to

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draw the first and second portions axially towards each other (Fig. 2). The first and second connecting assemblies cooperate so that the first and second circumferentially facing surfaces confront each other with the first and second tubular elements in the second relative rotational position to thereby block relative movement of the first and second tubular elements from the second relative rotational position back into the first rotational position (Figs. 1 and 2). One of the first and second connecting assemblies comprises a first radially outwardly extending projection (9) and the other of the first and second connecting assemblies has a groove (6) with a substantially uniform width in which the projection guidingly moves as the first and second tubular elements are changed between the first and second relative rotational positions (Figs. 1 and 2). The first radially outwardly extending projection has an elongated shape with a length extending circumferentially relative to the one of the first and second connecting assemblies and a narrower width along the first and second axes (Figs. 1-9).

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## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnoff.

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Barnoff disclose a method having all the steps required above for the rejection of claim 21. Barnoff discloses that the first and second assembles cooperate by causing interaction between a projection (42) with a groove (36). Barnoff fails to disclose that the first and second connecting assemblies causing interaction between a plurality of axially spaced projections with a plurality of grooves each with an axial rise. However, it would have been obvious to one having ordinary skill in the art at the time of Applicant's invention to have a plurality of axially spaced projections interacting with a plurality of grooves each with an axial rise since it has been held that mere duplication of essential working parts of a device involves only routine skill in the art such that the step of causing the first and second connecting assemblies to cooperate comprises causes a plurality of axially spaced projections to interact one each with a plurality of grooves each with an axial rise. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

# Allowable Subject Matter

- 7. Claims 1-20 are allowed.
- 8. Claim 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Response to Arguments

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9. Applicant's arguments with respect to claims 21 and 23-27 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gilbert (US 1,951,754), Pietro (US 4,911,573), Haynes (US 6,447,021 B1) and Ray et al. (US 6,811,190 B1) are cited to show state of the art with respect to telescoping mechanism having a connection means similar to the one being claimed by the current application.

Nishimura et al. (US 5,926,910) and Vesser (US 6,108,865) are cited to show state of the art with respect to fluid blower having a connection means similar to the one being claimed by the current application. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C. Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez Patent Examiner Art Unit 3677

rcr February 20, 2006

> /ROBERT J. SANDY PRIMARY EXAMINER